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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,142

09/22/2003

Isao Kakuhari

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WENDEROTH, LIND & PONACK, L.L.P.

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WASHINGTON, DC 20006-1021

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PAPER NUMBER

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MAIL DATE

DELIVERY MODE

04/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/665,142	<b>Applicant(s)</b> KAKUHARI ET AL.	
	<b>Examiner</b> LUN LAO	<b>Art Unit</b> 2615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17 and 19-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02-11-2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Introduction***

1. This action is in response to the amendment filed on 02-11-2008. Claims 1-16, 18, and 27-36 have been cancelled and claims 17 and 19-26 have been amended. Claims 17 and 19-26 are pending.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02-11-2008 has been entered.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Clark, Jr. et al (US PAT 5,848,169).

Consider claim 17 Clark teaches a noise reduction apparatus for reducing noise propagated toward a predetermined space on one side of a wall from an external noise source on another side of the wall, comprising(see fig.7):

a housing(5), to be attached to a surface of the wall so as to face the external noise source and thereby block a noise propagation path, for generating an enclosed spaces for noise reduction between said structure housing and the wall(see fig.7);

a loudspeaker (112, 150), to be attached to the housing so as to face the external noise source and thereby block the noise propagation path, for radiating sound into the enclosed spaces;

a sound detector (110) to be placed within the enclosed space for detecting sound propagated from the external noise source through said loudspeaker; and

a control arrangement (114) for causing said loudspeaker to radiate sound so as to minimize sound to be detected by said sound detectors, based on a results corresponding to the sound as detected by said sound detector(110 and see col. 6 line 22-62).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr (US PAT. 5,848,169) in view of Fuller et al (US PAT. 5,692,053).

Consider claim 19 Clark does not explicitly teach the noise reduction apparatus further comprising: a vibration damping section for damping a vibration in a position barycenter of a corresponding enclosed space.

However, Fuller teaches a vibration damping section for damping a vibration in a position barycenter of a corresponding enclosed space (see fig. 4 and col. 4 line 32-52).

Therefore it would have been Obvious to one having ordinary skill in the art at the time the invention was made to modify Clark with the teaching of Fuller to provide to the active vibration inputs in order to minimize the radiated sound.

Consider claims 20-21 Clark teaches the noise reduction apparatus wherein said vibration damping section comprises a pole for connecting a corresponding said housings with the wall (see fig. 7 and col. 6 line 22-62); and the noise reduction apparatus according to claim 20, wherein of said sound detectors is connected to said pole (see fig. 7 and col. 6 line 22-62).

Consider claims 22-23 Clark as modified by Fuller teaches the noise reduction apparatus wherein of said vibration damping sections comprises a plummet to be positioned at the barycenter of the enclosed space (Fuller, see fig. 4 and col. 4 line 32-52); and the noise reduction apparatus further comprising: a film connected to each of said housings for generating a closed space within a of the enclosed space (Fuller, see fig. 3 (75) and col. 6 line 22-67).

Consider claim 24 Clark teaches the noise reduction apparatus wherein said control arrangement comprises a control section placed in of the enclosed spaces(see fig. 7 and col. 6 line 22-62).

Consider claims 25-26 Clark as modified by Fuller teaches the noise reduction apparatus further comprising: a noise detector to be positioned outside the predetermined space, wherein said control arrangement is for generating control signals based on results corresponding to the sound as detected by said sound detectors and noise as detected by said noise detector(Fuller, see fig. 4 (84) and col. 4 line 32-52); and the noise reduction apparatus wherein loudspeaker comprises a piezoelectric loudspeaker(Fuller, see fig.3 (74) and col. 6 line 22-67).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 17 and 19-26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hobelsberger (US PAT. 5,461,676) is cited to show other related noise control apparatus.

9. Any response to this action should be mailed to:

Mail Stop \_\_\_\_ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Facsimile responses should be faxed to:  
**(571) 273-8300**  
Hand-delivered responses should be brought to:  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See  
/Lun-See Lao/  
Examiner, Art Unit 2615  
Patent Examiner  
US Patent and Trademark Office  
Knox  
571-272-7501  
Date 04-15-2008

/Vivian Chin/  
Supervisory Patent Examiner, Art Unit 2615